## **ABSTRACT**

Methods and associated structure for flexible, easy-to-use, robust, statistical analysis of one or more factors associated with a continuous response outcome. A simple user interface provides a wide variety of statistical analysis derived from user provided data. The user provides data in a simple tabular format after which no further human intervention is required to manipulate the data. Data is automatically manipulated and transformed as required to perform the desired, selected statistical analysis. Reduction of human interaction in manipulating data to perform desired statistical analysis improves statistical analysis processes by reducing human errors introduced in three data manipulation and encouraging users to perform or thorough analysis because time-saving shortcuts are no longer required.